

## SELEX SISTEMI INTEGRATI AT LE BOURGET 2011

***SELEX Sistemi Integrati, a Finmeccanica company, takes part to the 2011 edition of Le Bourget, which takes place from 20<sup>th</sup> to 26<sup>th</sup> June. The company attends the international exhibition with its state of the art products in the domain of large systems for defence and security, displayed into the Finmeccanica stand and visible in the static exhibition, into the stand itself and into the Integrated Capabilities Area (ICA).***

### **Finmeccanica Static exhibition**

In the area dedicated to the static exhibition of Finmeccanica, SELEX Sistemi Integrati displays a new radar, the LYRA 10 radar in mobile configuration, and mounted on vehicles. LYRA 10 is in fact on the **MOVIT** system, the mobile unit of the maritime surveillance Italian system VTMS (Vessel Traffic Management System) and equips the **LYRA on Lince**, a light multirole vehicle for detection applications in operational activities.

In the static exhibition SELEX Sistemi Integrati presents the **G33** antenna, painted in red, white and green on the occasion of the 150<sup>th</sup> anniversary of the Italian Unification.

### **Finmeccanica Stand**

The utmost expression of the company competences in the Security and Defence domains is represented into an **Integrated Capabilities Area** (ICA), set into the Finmeccanica stand. Within the mentioned area, SELEX Sistemi Integrati shows its skills as system integrator of its own and the other Finmeccanica Group companies' capabilities.

The management of three different Security and Defence operational missions is shown. The first area, dedicated to the demonstration of the multinational operational capabilities, the **Joint and Combined Defence Operations Area**, includes, among others, the SIACCON2 system and the Combat Management System (CMS), as installed into the Italian aircraft carrier Cavour; in the second area, the **Homeland protection Area**, it is possible to assist to a demonstration of the operational capabilities in the coastal and maritime domain, through the use of a border control system, realized with the coastal version of the RASS radar (RASS C), the LYRA 10, the LYRA 50, the MOVIT, and the electro optical sensor Medusa MK4/L; in the third area **Securing Major Events**, it is demonstrated the management of a big sports event through the Major Events Management System (MEMS) in which the company capabilities in this domain are shown.

Within the Finmeccanica stand there are also presented the main state of the art products which feature the offer of complex large systems. Within the **Large Systems** area there are, in fact, on show the **Blue Shield** system for air defence, the **Integrated Cyber Shield**, for protecting critical infrastructures from cyber threats, the **Blue and Green Border control**, for the border control, **Forza NEC**, the Italian Armed Forces digitalization programme and the **Turn-key airport**, a system for the realization of global airports. Again in the same area, there is a corner reserved to the **innovation for Large Systems**, in which a deterrence non lethal system, **DESTO (Direct Electromagnetic STOpper)** and **TWR-S** (Through the Wall radar), a radar able to "see" through the wall, are displayed. In the **Defence and Security** area there is on display the **Anteo Defence**, for the critical infrastructures protection and security. Into the **Training and Support area** SELEX Sistemi Integrati shows the **T5 e Voice 4M** equipments for the logistic support through virtual reality. Finally, in the **Air Systems** area the Mission Support System in the version for the Italian Military Air Force is presented.

**SELEX Sistemi Integrati**, a Finmeccanica company, designs and develops Large Systems for Homeland Protection, systems and radar for air defence, battlefield management, naval warfare, air traffic control, coastal and maritime surveillance. Fifty years of experience in system integration have created a customer base in no less than 150 countries. **SELEX Sistemi Integrati** has complete mastery of the advanced technologies involved – the company's true wealth and expertise – as well as an extensive commercial offer of state-of-the-art solutions and products, backed up by full logistic support.

With about 4,500 employees and plants in Italy, the UK, Germany and the USA, **SELEX Sistemi Integrati** is a leader in research and development thanks to annual investments amounting to 20% of the production value.

## THE PRODUCTS

### STATIC EXHIBITION

#### LYRA on Lince

The availability of transportable radars as the LYRA 10 mounted onboard of light Multirole Vehicles (LMV), like the Lince, can reliably answer to the autonomous detection requirement for vehicles along operational activities and can be an important help in the threat identification. The equipment can be applied in many domains all related to the security for the convoys movements, the precautionary protection of usual routes, the fix or temporary check points, the border surveillance, the territory sensitive areas. The LYRA 10 radar is a product specifically born for Homeland Protection applications and is available for fixed installation on tower, on vehicles and, in general, for portable applications.

#### MOVIT

The MOVIT, equipped with the LYRA 10 radar, is the mobile unit of the Italian system for maritime surveillance VTMS (Vessel Traffic Management System). Easily deployable and integrable within the VTMS surveillance network, the MOVIT, operational 24 hrs a day, ensures the coverage of particularly orographically difficult zones. The MOVIT can replace a local control centre of the VTMS system, duplicating all its functionalities, as the acquisition, the control, the integration and the presentation of data collected from the several sensors installed onto the mobile unit, the management of the tactical activities and the transmission of data to the closest control centre to be integrated within the whole surveillance network.

#### G33 IN A THREE COLOURED LIVERY

The G33 is the antenna in use on the ATCR-33S, one of the traditional state of the art products of SELEX Sistemi Integrati, and among the most used air traffic control radars in the world. The ATCR-33S is a high performance primary radar in S band for air traffic control applications in terminal area, which uses a solid state transmitter. For the 150<sup>th</sup> anniversary of the Italian Unification, the G33 is on show in an unusual three coloured, red, white and green (the Italian flag colours) livery at Le Bourget 2011.

## FINMECCANICA STAND

### LARGE SYSTEMS AREA

#### Blue Shield®

Blue Shield® is a state of the art C4I system for air surveillance and defence, also allowing air defense reaction capabilities enhancement. The system integrates different kind of surveillance radars (Long/Medium range) and weapon systems. Blue Shield is a modular system based on an open architecture that also allows the integration of coastal and border protection systems.

#### Blue and Green Border Control

This C4I system represents an advanced solution for Blue and Green Border Control. It integrates networked surveillance sensors, air, naval and space platforms, existing naval assets, operational centres at different hierarchical level. The system permits the control and management of territorial waters. Effective monitoring is achieved by the fusion of satellite images and radar pictures.

#### INTEGRATED CYBER SHIELD™

INTEGRATED CYBER SHIELD™ is an advanced solution that aims to protect systems of system and critical infrastructures against any kind of cyber attacks. This solution is based on two pillars, a system architecture approach for realizing high resilience infrastructures and a command and control system that analyses, protects and contrasts cyber intrusions.

#### Forza NEC

The Forza NEC system for the land forces units digitalization has the scope of improving the operational efficiency in any intervention and in out of area operations. The system is designed to support peace-keeping and peace-enforcement missions. Within the joint and combined defence operations area, through the simulation the demonstrator is able to support the analysis of critical aspects of the architecture related to the Integrated Land Brigade (BIT). The main components are a scenario generator and animator, a simulation environment for the communications, platforms simulators (vans and UAV), weapon sensors and systems.

## **Turn-key airport**

Turn Key Airport is the solution designed to deliver a fully operational airport system in a very short time, based on the fast development of integrated airside and landside systems, inside an ad-hoc modular terminal to answer the need of increasing air traffic. This total airport management solution has been structured by SELEX Sistemi Integrati into three main layers that embrace security, safety and services.

## ***Innovation for Large Systems***

### **DESTO**

DESTO (Direct Electromagnetic STopper) is an advanced non-lethal device realized to stop and neutralize at distance, advancing adversaries by crippling the electrical parts of engines with radiofrequency electromagnetic pulses, when engines are provided with standard and not particularly shielded electronic parts.

### **TWR-S**

TWR-S (Through the Wall radar) is an innovative hand-held system to see inside buildings, for civil and military applications during on-field emergency operations. The new system provides immediate detection of humans behind concrete walls and their continuous tracking. It is able to provide building layout and to detect life signs.

## **DEFENCE AND SECURITY AREA**

### **ANTEO Defence**

ANTEO defence is an advanced solution for land critical infrastructures protection. Flexible and expandable, ANTEO defence allows to control, monitor and coordinate, by a single central unit (C2), several heterogeneous systems (radars, E/O sensors, acoustic sensor, manned and unmanned vehicles, legacy systems) in a simple and efficient way. Main functions are surveillance, automatic detection and tracking, classification and identification, route planning and manned/unmanned vehicle management, reaction to a threat, diagnostics management and data recording and analysis.

## **TRAINING AND SUPPORT AREA**

### **T5**

T5 is an advanced suite of systems and products, for the remote, integrated and centralized management of heterogeneous civil and military equipment, having different geographical distribution, in order to improve the efficiency of the integrated logistics support. T5 is available in different versions and may be used both as a service and as a product for equipment maintenance management.

### **Voice 4M**

Voice 4M is an advanced collaborative environment conceived in support to training, operation and maintenance of remote complex equipment. The system provides real time communication between a centre of competence garrisoned from experts and a remote site. In real time, Voice4M allows the expert technician to see the actions carried out from the field operator, to suggest the maintenance actions for a faulty system restoration, to support field activities with additional information transferred to the remote site.

## **AIR SYSTEMS AREA**

### **Mission Support System**

The Italian Air Force Mission Support System station is a total planning system providing support for various different aircraft, weapons systems and types of mission, also used for planning the deployment of stand-off missiles, e.g. the Storm Shadow. The IAF-MSS has been designed for the Tornado and AM-X aircraft, and subsequently extended to support C130J, MB339, C27J aircraft and NH90 Tactical Transport Helicopter.